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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/694,888	10/29/2003	Walter Henry Berryman	0641-0255P	4113

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EXAMINER

TALBOT, BRIAN K

ART UNIT	PAPER NUMBER
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1762

DATE MAILED: 09/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/694,888

Applicant(s)

BERRYMAN, WALTER HENRY

Examiner

Brian K. Talbot

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 June 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☒ Other: See Continuation Sheet.

Continuation of Attachment(s) 6). Other: certified copies of foreign priority.

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1. The amendment filed 6/23/05 has been considered and entered. Claims 13-24 have been canceled. Claims 1-12 remain in the application.

2. A copy of the foreign priority certified documents have been received.

3. In light of the amendments filed 6/23/05, the objection to the specification has been withdrawn. In addition, the 35 USC 112 first and second paragraph rejections have been withdrawn.

Claim Rejections - 35 USC § 112

4. Claims 1-12 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. The step of forming the thick film circuit is critical or essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976). The claims recite applying a dielectric layer to a titanium substrate and firing. No steps of forming the circuitry are recited.

Claim Rejections - 35 USC § 103

5. Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over DE 383598 A1.

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DE 383598 A1 teaches a method for producing electronic circuits for thick-films in sensors in conjunction with a strain-gauge built onto the substrate. At least one insulation layer is applied onto a metallic substrate and the insulating layer is fitted with conducting tracks and or electronic components. The substrate is a titanium-alloy or respectively titanium.

With respect to claim 1, DE 383598 A1 fails to teach the insulating is glass and the glassy layer is fired.

While the examiner acknowledges this fact, it is the Examiner's position that it would have been within the skill of one practicing in the art to have modified DE 383598 A1 process by utilizing a glassy insulating layer in place of the insulating utilized with the expectation of achieving similar results.

With respect to claims 4-10, the claims require more than one insulating glassy layer as well as applying to the opposite side of the titanium-alloy substrate. While the Examiner acknowledges the fact that the reference is silent upon the number of layers and coating the underside of the substrate, it is the Examiner's position that one skilled in the art at the time the invention was made would have had a reasonable expectation of achieving similar success regardless of the number of layers or the top/bottom area of the substrate.

With respect to the hybrid circuit (claim 2), diffusion of lead (claim 3) and adjusting the ink proportions to control the coefficient of resistivity (claim 12), it is the Examiner's position that these limitations are conventional in the art and would therefore be a matter of design choice of the practitioner.

Response to Amendment

6. Applicant's arguments filed 6/23/05 have been fully considered but they are not persuasive.

Applicant argued that DE 383598 A1 teaches heating in an inert atmosphere and not an oxidizing atmosphere.

The Examiner disagrees. The abstract and disclosure does not support Applicant's interpretation of the firing step. Col. 2, lines 10-20 recite oxygen with heating temperatures and this would support the Examiner's position that an oxidizing atmosphere is utilized.

A complete translation has been requested, however, a copy is not available at this time.

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

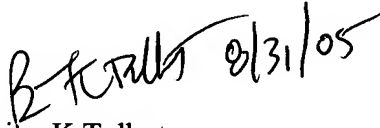
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

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8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian K Talbot whose telephone number is (571) 272-1428. The examiner can normally be reached on Monday-Friday 6AM-3PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy H Meeks can be reached on (571) 272-1423. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

 02/31/05
Brian K Talbot
Primary Examiner
Art Unit 1762

BKT